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09/866,502	05/25/2001	Frederick Robert Chang	SBC-0101	4455

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EXAMINER

JACOBS, LASHONDA T

ART UNIT PAPER NUMBER

2157

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/866,502

Applicant(s)

CHANG ET AL.

Examiner

LaShonda T. Jacobs

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

This Office Action is in response to Applicant's Amendment/Request for Reconsideration filed on May 12, 2005. The final rejection has been withdrawn. Claims 1-36 are presented for further examination.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1**, **15** and **25** are rejected under 35 U.S.C. 102(e) as being anticipated by Emens et al (hereinafter, "Emens", U.S. Pat. No. 6,606,643).

As per claim **1**, Emens discloses a method for improving the reliability of peer-to-peer network downloads, comprising:

- initiating a search from a client on a peer-to-peer network (abstract and col. 4, lines 47-67);
- receiving a list of servers that satisfy the search (col. 10, lines 27-41); and
- selecting at least one of the servers from the list of servers (col. 10, lines 52-57);
- selecting one of a plurality of downloading systems based on a predetermined criteria (abstract and col. 10, lines 52-57); and

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- downloading a file using one of the plurality of downloading systems (col. 10, lines 42-51).

As per claim 15, Emens discloses a method of improving the reliability of peer-to-peer network downloads, comprising the steps of:

- originating a search from a client on a peer-to-peer network (abstract and col. 4, lines 47-67);
- broadcasting a search query over the peer-to-peer network (col. 10, lines 27-41);
- receiving a list of servers and a list of associated document names that satisfy the search query (col. 10, lines 27-41);
- selecting at least one of the servers from the list of servers (col. 10, lines 52-57);
- determining one of a plurality of downloading systems based on a predetermined criteria (abstract and col. 10, lines 52-57); and
- downloading a file (col. 10, lines 42-51).

As per claim 25, Emens discloses a method of operating a peer-to-peer network comprising the steps of:

- initiating a search from a first peer to the peer-to-peer network (abstract and col. 4, lines 47-67);
- receiving a list of peer servers that meet a search query (col. 10, lines 27-41); and
- selecting one of a plurality of downloading systems based on a predetermined criteria (abstract and col. 10, lines 52-57).
- downloading a file using the one of the plurality of downloading systems (col. 10, lines 42-51).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-14, 16-24 and 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emens in view Casagrande et al (hereinafter, "Casagrande", U.S. Pat. No. 6,381,709).

As per claim 2, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (d) further includes the step of:

- selecting a multiple concurrent download system.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- selecting a multiple concurrent download system (col. 6, lines 32-45).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a plurality of downloading systems in order to allow a client to download different portions of a file in a timely and efficient manner.

As per claim 3, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (d) further includes the step of:

- selecting a multiple concatenated download system.

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In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- selecting a multiple concatenated download system (col. 6, lines 32-45).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a plurality of downloading systems in order to allow a client to download different portions of a file in a timely and efficient manner.

As per claim 4, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (d) further includes the step of:

- selecting a serial concatenated download system.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- selecting a serial concatenated download system (col. 6, lines 32-45).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a plurality of downloading systems in order to allow a client to download different portions of a file in a timely and efficient manner.

As per claim 5, Emens discloses wherein step (d) further includes the step of:

- determining a connection speed to the at least one of the servers (abstract and col. 4, lines 47-67).

As per claim 6, Emens discloses wherein step (d) further includes the step of:

- comparing a connection speed to the at least one of the servers to an available

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bandwidth (abstract and col. 10, lines 27-41).

As per claim 7, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (a) further includes the steps of:

- entering a text string.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- entering a text string (col. 9, lines 3-7).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a text string in order to allow a client to input the name of the file to download in a timely and efficient manner.

As per claim 8, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (a) further includes the steps of:

- entering a unique key:

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- entering a unique key (col. 9, lines 3-7).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a text string in order to allow a client to input the name of the file to download in a timely and efficient manner.

As per claim 9, Emens discloses wherein step (a) further includes the step of:

- broadcasting a search query to the peer-to-peer network (col. 10, lines 27-41).

As per claim 10, Emens discloses wherein step (a) further includes the step of:

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- transmitting a search query to a central server (col. 10, lines 27-41).

As per claim 11, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (b) further includes the step of:

- receiving a document name.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- receiving a document name (col. 9, lines 3-7).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a text string in order to allow a client to input the name of the file to download in a timely and efficient manner.

As per claim 12, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (b) further includes the step of:

- receiving a file size.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- receiving a file size (col. 9, lines 3-7).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a file size in order to allow a client download an entire file in a timely and efficient manner.

As per claim 13, Emens discloses wherein step (b) further includes the step of:

- receiving a source node for a file (col. 10, lines 27-41).

As per claim 14, Emens discloses wherein step (b) further includes the step of:



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- receiving an available bandwidth at a server (abstract and col. 10, lines 27-41).

As per claim 16, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (a) further includes the step of:

- entering a unique key that identifies the file (paragraph 0041):

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- entering a unique key that identifies the file (col. 9, lines 3-7).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a text string in order to allow a client to input the name of the file to download in a timely and efficient manner.

As per claim 17, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (c) further includes the step of:

- receiving a file size, a source node and a unique key.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- receiving a file size, a source node and a unique key (col. 9, lines 3-7).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Emens by including a file size in order to allow a client download an entire file in a timely and efficient manner.

As per claim 18, Emens discloses wherein step (d) further includes the step of:

- measuring a connection speed to a plurality of servers (abstract and col. 4, lines 47-67);

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- comparing the connection speed of the plurality of servers to an available bandwidth to the client (abstract and col. 4, lines 47-67).

As per claim **19**, Emens discloses wherein step (e) further includes the steps of:

- determining an available bandwidth is less than a connection speed to two of the servers (abstract and col. 4, lines 47-67);
- when the available bandwidth is less than the connection speed to two of the servers, selecting a serial concatenated download system (abstract and col. 4, lines 47-67).

As per claim **20**, Emens discloses the steps of:

- when the available bandwidth is not less than the connection speed to two of the servers, selecting a multiple concurrent download system (abstract and col. 4, lines 47-67).

As per claim **21**, Emens discloses the steps of:

- when the available bandwidth is not less than the connection speed to two of the servers, selecting a multiple concatenated download system (abstract and col. 4, lines 47-67).

As per claim **22**, Emens discloses wherein step (e2) further includes the steps of:

- starting a download from one of the list of servers (col. 10, lines 42-51).

However, Emens does not explicitly disclose:

- if the one of the list of servers is interrupted during the download, selecting a second of the list of server to start a download;
- requesting the download to start at a next byte after a last received byte.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

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- if the one of the list of servers is interrupted during the download, selecting a second of the list of server to start a download (abstract and col. 10, lines 19-34);
- requesting the download to start at a next byte after a last received byte (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim **23**, Emens discloses wherein step (e3) further includes the steps of:

- starting a download from at least two of the servers (col. 10, lines 42-51);

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- if any of the at least two of the servers finishes the download, terminating the download for any other servers (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim **24**, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein step (e3) further includes the steps of:

- starting a first download at a first byte of the file for one of the at least two servers;
- starting a second download at a second byte of the file for a second of the at least two servers;

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- determining when a complete file has been downloaded by combining the first download and the second download.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- starting a first download at a first byte of the file for one of the at least two servers (abstract and col. 10, lines 19-34);
- starting a second download at a second byte of the file for a second of the at least two servers (abstract and col. 10, lines 19-34); and
- determining when a complete file has been downloaded by combining the first download and the second download (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim 26, Emens discloses wherein step (c) further includes the steps of:

- determining a connection speed to each of the peer servers on the list of peer servers (abstract and col. 10, lines 27-41);
- selecting a subset of the list of peer servers based on the connection speed (abstract and col. 10, lines 27-41).

As per claim 27, Emens discloses wherein step (c1) further includes the step of:

- receiving a test file from each of the servers on the list of servers (col. 10, lines 27-41).

As per claim 28, Emens discloses wherein step (c1) further includes the step of:

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- determining an order of response receipt from each of the servers on the list of servers (col. 10, lines 27-41).

As per claim **29**, Emens discloses wherein step (c1) further includes the step of:

- pinging each of the servers on the list of servers (col. 10, lines 27-41).

As per claim **30**, Emens discloses wherein the step (d) further includes the steps of:

- when an available bandwidth is less than a two times a connection speed, selecting a server with a fastest connection speed; and
- starting a download from the server with the fastest connection speed.

As per claim **31**, Emens discloses the invention substantially as claims discussed above.

However, Emens does not explicitly disclose wherein the step (d) further includes the steps of:

- determining if the server with the fastest connection speed had an error before the file was downloaded;
- when the server with the fastest connection speed had an error before the file was downloaded, selecting a second server;
- determining a last byte received; and
- transmitting download starting from a next byte command to a second server.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- determining if the server with the fastest connection speed had an error before the file was downloaded (abstract and col. 10, lines 19-34); and

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- when the server with the fastest connection speed had an error before the file was downloaded, selecting a second server (abstract and col. 10, lines 19-34).
- determining a last byte received (abstract and col. 10, lines 19-34); and
- transmitting download starting from a next byte command to a second server (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim **32**, Emens discloses wherein the step (d) further includes the steps of:

- when an available bandwidth is not less than a two times a connection speed, selecting a plurality of servers from the list of servers (abstract and col. 4, lines 47-67); and

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- starting a plurality of simultaneous downloads from the plurality of servers (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim **33**, Emens disclose the invention substantially as claims discussed above.

However, Emens does not explicitly disclose the steps of:

- determining if the client has received a complete version of the file from one of the plurality of servers;

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- when the client has received a complete version of the file from one of the plurality of servers, terminating a rest of the downloads.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- determining if the client has received a complete version of the file from one of the plurality of servers (abstract and col. 10, lines 19-34); and
- when the client has received a complete version of the file from one of the plurality of servers, terminating a rest of the downloads (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim **34**, Emens discloses the steps of:

- when an available bandwidth is not less than a two times a connection speed, selecting a plurality of servers from the list of servers (abstract and col. 4, lines 47-67); and

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- starting a plurality of simultaneous offset downloads from the plurality of servers (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim **35**, Emens disclose the step of:

- when a complete file can be formed from the plurality of simultaneous offset downloads, constructing a complete file.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- when a complete file can be formed from the plurality of simultaneous offset downloads, constructing a complete file (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

As per claim 36, Dutta discloses a method of operating a peer-to-peer network comprising the steps of:

- initiating a search from a first peer to the peer-to-peer network (abstract and col. 4, lines 47-67);
- receiving a list of peer servers, a plurality of associated file names, a plurality of file sizes, a plurality of bandwidths and a plurality of source nodes that meet a search query (col. 10, lines 27-41);
- determining a connection speed to each of the peer servers on the list of peer servers (col. 10, lines 52-57);
- selecting a subset of the list of peer servers based on the connection speed (col. 10, lines 52-57); and
- when an available bandwidth is not less than a two times a connection speed, selecting a plurality of servers from the list of servers (abstract and col. 4, lines 47-67).



However, Emens does not explicitly disclose:

- when an available bandwidth is less than a two times the connection speed, selecting a server with a fastest connection speed;
- starting a download from the server with the fastest connection speed;
- determining if the server with the fastest connection speed had an error before the file was downloaded;
- when the server with the fastest connection speed had an error before the file was downloaded, selecting a second server;
- determining a last byte received;
- transmitting a download starting from a next byte command to a second server;
- starting a plurality of simultaneous downloads from the plurality of servers;
- determining if the client has received a complete version of the file from one of the plurality of servers; and
- when the client has received a complete version of the file from one of the plurality of servers, terminating a rest of the downloads.

In an analogous art, Casagrande discloses a process and apparatus for downloading data from a server computer to a client computer comprising:

- when an available bandwidth is less than a two times the connection speed, selecting a server with a fastest connection speed (abstract and col. 10, lines 19-34);
- starting a download from the server with the fastest connection speed (abstract and col. 10, lines 19-34);

- determining if the server with the fastest connection speed had an error before the file was downloaded (abstract and col. 10, lines 19-34);
- when the server with the fastest connection speed had an error before the file was downloaded, selecting a second server (abstract and col. 10, lines 19-34);
- determining a last byte received (abstract and col. 10, lines 19-34);
- transmitting a download starting from a next byte command to a second server (abstract and col. 10, lines 19-34);
- starting a plurality of simultaneous downloads from the plurality of servers (abstract and col. 10, lines 19-34);
- determining if the client has received a complete version of the file from one of the plurality of servers (abstract and col. 10, lines 19-34); and
- when the client has received a complete version of the file from one of the plurality of servers, terminating a rest of the downloads (abstract and col. 10, lines 19-34).

Given the teaching of Casagrande, it would have been obvious to one of ordinary skill in the art at the time the invention was to modify Emens by including a start byte for the download allowing a client to download different portions of a file in a timely and efficient manner.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,098,180 to Kobata et al

U.S. Pat. No. 6,606,646 to Feigenbaum

U.S. Pat. No. 6,195,680 to Goldszmidt

U.S. Pat. No. 5,553,083 to Miller

U.S. Pat. No. 6,216,163 to Bharali et al


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 571-272-4004. The examiner can normally be reached on 8:30 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShonda T Jacobs  
Examiner  
Art Unit 2157

ltj  
June 8, 2005

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100